No of printed pages/Questions:02/12

O. P. JINDAL SCHOOL, SAVITRI NAGAR

Periodic Test III – Round –II (2024-2025)

Class: XI | MM: 20
Subject: Biology | Time: 1 Hour

General Instructions:

- *Question paper contains 03 Sections (Section – A, Section – B, Section – C)*
- *Section A – Multiple Choice Questions (MCQ's) carries 01 mark each.*
- *Section B – Very Short Answer Type Questions carries 02 marks each.*
- *Section C – Short Answer Type Questions carries 03 marks each.*

SECTION-A

Q1. This ion is responsible for unmasking active sites for myosin or

cross-bridge activity during muscle contraction

(a) Potassium (b)Magnesium
(c) Calcium (d)Sodium

Q2. A motor neuron stimulates a muscle fiber at___________

(a) the sarcoplasmic reticulum (b)the myofibril
(c)the transverse tubules (d) the neuromuscular junction

Q 3. Which is the correct description of a certain part of a

normal human skeleton

(a) Glenoid activity is a depression to which the thigh bone articulates
(b) the first vertebra is the axis which articulates with the occipital condyles
(c) the 9th and 10th pairs of ribs are called the floating ribs
(d) The parietal bone and the temporal bone of the skull are joined by a fibrous joint.

Q-5. The resting membrane potential is established primarily due to:

(a) Sodium-potassium pump (b)Efflux of potassium
(c)Influx of sodium (d)Influx of chloride

Q-6. Which of the following is not a part of a neuron?

(a) Cell body (b) Lignin

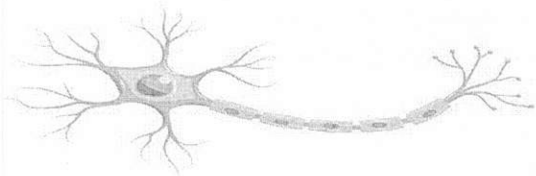
(c) Dendrites (d) Axon

SECTION-B

Q-7. Bring out the role of calcium ions and ATP in muscle contraction.

Q8. (a) What type of neuron is this ? Justify your answer.

(b)What is the significance of synaptic knob in nerve impulse conduction?



Q-9. Describe any two disorders of muscular system.

Q-10 (a)Why is the cerebral cortex referred to as grey matter?

(b).Why is the inner part of cerebral hemisphere referred to as white matter ?

SECTION-C

Q-11. Explain how transmission of nerve impulse takes place at chemical synapse.

Q-12.Describe the important steps in the mechanism of muscle contraction.

OR

Describe the detailed structure of an actin fibre and a myosin fibre.

****